UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/675,694	09/29/2000	Manav Mishra	42390P9326	1491

7590 11/20/2003

Libby N Ho
Blakely Sokoloff Taylor & Zafman LLP
7th Floor
12400 Wilshire Boulevard
Los Angeles, CA 90025

EXAMINER	
LAZARO, DAVID R	

ART UNIT	PAPER NUMBER
2155	6

DATE MAILED: 11/20/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/675,694	MISHRA ET AL.	
	Examiner	Art Unit	
	David Lazaro	2155	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *16 July 2001*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-25* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-25* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☒ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *29 September 2000* is/are: a)☐ accepted or b)☒ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. §§ 119 and 120

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

13)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

a) ☐ The translation of the foreign language provisional application has been received.

14)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) *5*.
4) ☐ Interview Summary (PTO-413) Paper No(s). _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other:

DETAILED ACTION

Claims 1-25 are pending in this office action.

Papers Received

1. The Oath/Declaration and Fee was received on 1/26/01.

2. The Petition for Extension of Time was received on 1/26/01.

Information Disclosure Statement

3. The information disclosure statement (IDS) submitted on 7/16/01 has been considered by the examiner.

Specification

4. The disclosure is objected to because of the following informalities: Please provide the serial number for the pending application noted on page 8, line 19.

Appropriate correction is required.

Drawings

5. The drawings are objected to as failing to comply with 37 CFR 1.84(p)(5) because they include the following reference sign(s) not mentioned in the description: In Fig. 1 and 2, reference sign 124. A proposed drawing correction, corrected drawings, or amendment to the specification to add the reference sign(s) in the description, are

required in reply to the Office action to avoid abandonment of the application. The objection to the drawings will not be held in abeyance.

Claim Objections

6. Claim 25 is objected to because of the following informalities: In line 3, "use" needs to be separated from "a". Appropriate correction is required.

Claim Rejections - 35 USC § 112

7. The following is a quotation of the second paragraph of 35 U.S.C. 112:

> The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

8. Claims 2 and 11 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

9. Claim 2 states the limitation "the server that the session I.D. is assigned to". The 'session I.D.' was not previously assigned to a server. The 'unique I.D.' was assigned to a server.

10. Claim 11 recites the limitation "the second request" in line 12. There is insufficient antecedent basis for this limitation in the claim.

Claim Rejections - 35 USC § 102

11. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

The changes made to 35 U.S.C. 102(e) by the American Inventors Protection Act of 1999 (AIPA) and the Intellectual Property and High Technology Technical Amendments Act of 2002 do not apply when the reference is a U.S. patent resulting directly or indirectly from an international application filed before November 29, 2000. Therefore, the prior art date of the reference is determined under 35 U.S.C. 102(e) prior to the amendment by the AIPA (pre-AIPA 35 U.S.C. 102(e)).

12. Claims 1-25 rejected under 35 U.S.C. 102(e) as being anticipated by U.S. Provisional application 60/188,142 by Swildens (Swildens). Note that the Non-Provisional Patent Application 2001/0034792 contains the same information as the provisional application noted above and will therefore be cited instead. A copy of both will be included with this office action.

13. With respect to Claim 1, Swildens teaches a method comprising: receiving a first request comprising a session identifier (I.D.) (Page 1, [0021] lines 1-3, Note that a Session I.D. is inherent in the SSL protocol), assigning a unique I.D. to the first request (Page 6, [0137]) selecting one of a plurality of servers to process the first request (Page 1, [0018] lines 4-7 and Page 7 [0148] lines 6-10) assigning the unique I.D. to the selected server (Page 6 [0137] and [0139]) and sending the first request to the server (Page 7 [0148] lines 6-10).

14. Note that in Swildens, a cookie or session ID can be used (Page 1 [0021] and Page 6 [0135]), and accordingly, all Claims will be examined from the viewpoint of using a session ID.

15. With respect to Claim 2, Swildens teaches all the limitations of Claim 1 and further teaches subsequently receiving a second request comprising the session I.D. (Page 6 [0139] lines 1-2); selecting the server that the session I.D. is assigned to (Page 6 [0139] lines 2-3); and sending the second request to the server (Page 6 [0139] lines 2-3).

16. With respect to Claim 3, Swildens teaches all the limitations of Claim 1 and further teaches selecting one of a plurality of servers to process the first request comprises using a load balancing algorithm to determine a server to the first request to (Page 7 [148] lines 6-10).

17. With respect to Claim 4, Swildens teaches a method comprising receiving a first request comprising a session identifier (I.D.) (Page 1, [0021] lines 1-3, Note that a Session I.D. is inherent in the SSL protocol); selecting one of a plurality of servers to process the first request (Page 7 [148] lines 6-10); mapping the session I.D. to the selected server (Page 6, [0137]); sending the first request to the selected server (Page 7 [0148] lines 6-10); subsequently receiving a second request comprising the session I.D. (Page 6 [0139] lines 1-2); determining that the second request comprises secure information (Page 5 [0107]); selecting the server that the session I.D. is assigned to (Page 6 [0139] lines 2-3); and sending the second request to the server (Page 6 [0139] lines 2-3).

18. With respect to Claim 5, Swildens teaches all the limitations of Claim 4 and further teaches the server is identified by an SSL (Secure Sockets Layer) context (Page 1 [0021] lines 5-7 and Page 6 [0125] and [0137] lines 1-4).

19. With respect to Claim 6, Swildens teaches all the limitations of Claim 4 and further teaches selecting one of a plurality of servers to process the first request comprises using a load balancing algorithm to determine a server to route the first request to (Page 7 [0148] lines 6-10).

20. With respect to Claim 7, Swildens teaches all the limitations of Claim 4 and further teaches determining that the second request comprises non-secure information (Page 1 [0009] lines 3-5); and using a load balancing algorithm to determine a server to route the second request to (Page 2 [0046] lines 11-20).

21. With respect to Claim 8, Swildens teaches a method comprising receiving a first request comprising a session identifier (I.D.) (Page 1, [0021] lines 1-3, Note that a Session I.D. is inherent in the SSL protocol); selecting one of a plurality of servers to process the first request (Page 7 [0148] lines 6-10), the server having a unique SSL (Secure Socket Layer) context, and the unique SSL context being associated with an SSL tunnel (Page 1 [0021] lines 5-7 and Page 6 [0125] and [0137] lines 1-4).; mapping the session I.D. to the selected SSL context (Page 6, [0137]); sending the first request to the selected server (Page 7 [0148] lines 6-10); subsequently receiving a second request comprising the session I.D. (Page 6 [0139] lines 1-2); determining that the second request comprises secure information (Page 5 [0107]); selecting the SSL

context that the session I.D. is assigned to and sending the second request to the server via the SSL tunnel associated with the SSL context (Page 6 [0139] lines 1-4).

22. With respect to Claim 9, Swildens teaches all the limitations of Claim 8 and further teaches selecting one of a plurality of servers to process the first request comprises using a load balancing algorithm to determine a server to route the first request to (Page 7 [0148] lines 6-10).

23. With respect to Claim 10, Swildens teaches all the limitations of Claim 8 and further teaches determining that the second request comprises non-secure information (Page 1 [0009] lines 3-5); and using a load balancing algorithm to determine a server to route the second request to (Page 2 [0046] lines 11-20).

24. With respect to Claim 11, Swildens teaches a method comprising receiving a request comprising a session identifier (I.D.) (Page 1, [0021] lines 1-3, Note that a Session I.D. is inherent in the SSL protocol); determining if the session I.D. is associated with an SSL (Secure Sockets Layer) context (Page 6 [139]); determining if the request is associated with a secure transaction (Page 5 [0107]); if no session I.D. is associated with an SSL context, then selecting one of a plurality of servers to process the first request (Page 7 [0148] lines 6-10), the server having a unique SSL (Secure Socket Layer) context, and the unique SSL context being associated with an SSL tunnel (Page 1 [0021] lines 5-7 and Page 6 [0125] and [0137] lines 1-4); and if the request is associated with a secure transaction, then: mapping the session I.D. to the selected SSL context (Page 6 [137]); and sending the second request to the server via the SSL tunnel associated with the SSL context (Page 6 [139]).

25. With respect to Claim 12, Swildens teaches all the limitations of Claim 11 and further teaches selecting one of a plurality of servers to process the first request comprises using a load balancing algorithm to determine a server to route the first request to (Page 7 [0148] lines 6-10).

26. With respect to Claim 13, Swildens teaches all the limitations of Claim 11 and further teaches determining if the request is associated with a secure transaction comprises determining if an SSL packet is associated with the request (Page 5 [0107]).

27. With respect to Claim 14, Swildens teaches all the limitations of Claim 11 and further teaches determining if the session I.D. is associated with an SSL (Secure Sockets Layer) context comprises looking up the session I.D. in a mapping table to determine if the mapping table comprises an entry for the session I.D. and a corresponding SSL context (Page 6 [0139]).

28. With respect to Claim 15, Swildens teaches a system comprising a dispatching processor unit to receive a first request comprising a unique session identifier (I.D.) (Page 1, [0021] lines 1-3, Note that a Session I.D. is inherent in the SSL protocol); select a server from a plurality of servers to process the request (Page 7 [0148] lines 6-10); assign the unique session I.D. to the selected server (Page 6 [0137]), and store the unique session I.D. and corresponding identifier for the selected server in a mapping table comprising entries of session I.D.s each having a corresponding server identifier (Page 7 [0142] Note: One embodiment of Swildens' invention has the mapping table on the system.); send the first request to the selected server (Page 7 [0148] lines 6-10); receive a second request comprising the unique session I.D. (Page 6 [0139] lines 1-2);

find the unique session I.D. in the mapping table; and send the second request to the server corresponding to the unique session I.D. in the mapping table (Page 6 [0139] lines 1-4).

29. With respect to Claim 16, Swildens teaches all the limitations of Claim 15 and further teaches a preexisting SSL (Secure Sockets Layer) tunnel exists between the dispatching processor unit and the selected server (Page 1 [0021] lines 5-7, Page 6 [0135] lines 1-3), the SSL tunnel being identified by an SSL context (Page 6 [0137] lines 2-4), and the mapping table comprising entries of session I.D.s each having a corresponding SSL context (Page 7 [0142] Note: One embodiment of Swildens' invention has the mapping table on the system.).

30. With respect to Claim 17, Swildens teaches all the limitations of Claim 15 and further teaches the dispatching processing unit selects one of a plurality of servers to process the request by using a load balancing algorithm to determine a server to route the request to (Page 7 [0148] lines 6-10).

31. With respect to Claim 18, Swildens teaches all the limitations of Claim 17 and further teaches the dispatching processing unit uses a load balancing algorithm to determine a server to route the request to by employing a load balancer (Page 7 [0148] lines 6-10).

32. With respect to Claim 22, Swildens teaches a machine-readable medium having stored thereon data representing sequences of instructions, the sequences of instructions which, when executed by a processor, cause the processor to perform the following: receive a first request comprising a session identifier (I.D.) (Page 1, [0021]

lines 1-3, Note that a Session I.D. is inherent in the SSL protocol); select one of a plurality of servers to process the first request (Page 1, [0018] lines 4-7 and Page 7 [0148] lines 6-10); map the session I.D. to the selected server(Page 6, [0137]); send the first request to the selected server (Page 7 [0148] lines 6-10); subsequently receive a second request comprising the session I.D. (Page 6 [0139] lines 1-2); determine that the second request comprises secure information (Page 5 [0107]); select the server that the session I.D. is assigned to; and send the second request to the server (Page 6 [0139] lines 1-4).

33. With respect to Claim 23, Swildens teaches all the limitations of Claim 22 and further teaches the server is identified by an SSL (Secure Sockets Layer) context (Page 1 [0021] lines 5-7 and Page 6 [0125] and [0137] lines 1-4).

34. With respect to Claim 24, Swildens teaches all the limitations of Claim 22 and further teaches the processor selects one of a plurality of servers to process the request by using a load balancing algorithm to determine a server to route the request to (Page 7 [0148] lines 6-10).

35. With respect to Claim 25, Swildens teaches all the limitations of Claim 22 and further teaches the processor to additionally determine that the second request comprises non-secure information (Page 1 [0009] lines 3-5); and use a load balancing algorithm to determine a server to route the second request to (Page 2 [0046] lines 11-20).

Claim Rejections - 35 USC § 103

36. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

37. Claims 19-21 are rejected under 35 U.S.C. 103(a) as being unpatentable over Swildens in view of U.S. Patent 6,505,250 by Freund et al. (Freund).

38. With respect to Claim 19, Swildens teaches a system comprising a dispatching processor unit to send client requests to a plurality of servers in a server farm (Page 1 [0020] lines 2-3); receive a client request comprising a session identifier (I.D.); determine if state information associated with the session I.D. already exists on one of a plurality of servers in the server farm (Page 6 [0139] lines 1-2); send the client request to the server if the state information already exists on a server (Page 6 [0139] lines 1-4); and employ a load balancer to determine one of the servers to send the client request to if the state information does not already exist on a server (Page 7 [0148] lines 6-10); a load balancer in communication with the dispatching processor unit to determine one of a plurality of servers to send the client request to (Page 7 [0148] lines 6-10). Swildens does not teach the use of a manager to determine which request of multiple client requests to the same server is processed first. However, it is well known in the art that requests being sent to the same server can be processed as decided by a quality of service manager as shown by Freund (Col. 4 line 66 to Col. 5 line 11). It would have

been obvious to one of ordinary skill in the art at the time the invention was made to take the system disclosed by Swildens and modify it as indicated by Freund with the system comprising a quality of service (QoS) manager in communication with the dispatching processor unit to decide which one of multiple client requests is processed if multiple client requests are sent to the same server. One would be motivated to have this so that important client requests can be handled before those that are not as important (Col. 3 lines 9-11 of Freund).

39. With respect to Claim 20, Swildens in view of Freund teaches all the limitations of Claim 19 and further teaches the dispatching processor unit determines if state information associated with the session I.D. already exists on one of a plurality of servers in a server farm by searching a mapping table comprising a session I.D. mapped to a server (Page 7 [0142] Note: One embodiment of Swildens' invention has the mapping table on the system.).

40. With respect to Claim 21, Swildens in view of Freund teaches all the limitations of Claim 19 and further teaches the session I.D. is mapped to a server by the session I.D. being associated with an SSL (Secure Sockets Layer) context (Page 7 [0142]), and the SSL context is associated with the server (Page 1 [0021] lines 5-7 and Page 6 [0125] and [0137] lines 1-4).

Conclusion

41. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

42. U.S. Patent 6,611,873 by Kanchara "Address-Based Service Request Distributing Method and Address Converter" August 26, 2003

43. U.S. Patent 6,598,167 by Devine et al. "Secure Customer Interface for Web Based Data Management" July 22, 2003

44. U.S. Patent 6,480,894 by Courts et al. "System and Method for Maintaining a State for a User Session Using a Web System" November 12, 2002

45. U.S. Patent 6,374,300 by Masters "Method and System for Storing Load Balancing Information with an HTTP Cookie" April 16, 2002

46. U.S. Patent 6,098,093 by Bayeh et al. "Maintaining Sessions in a Clustered Server Environment" August 1, 2000

47. U.S. Patent 6,041,166 by Hart et al. "Virtual Network Architecture for Connectionless LAN Backbone" March 21, 2000

48. U.S. Patent 5,875,296 by Shi et al. "Distributed File System Web Server User Authentication With Cookies" February 23, 1999

49. U.S. Patent 5,774,668 by Choquier et al. "System for On-Line Service in which Gateway Computer Uses Service Map which Includes Loading Condition of Servers Broadcasted by Application Severs for Load Balancing" June 30, 1998

50. Freier et al. "The SSL Protocol Version 3.0" Internet-Draft from the Transport Layer Security Working Group of IETF

Any inquiry concerning this communication or earlier communications from the examiner should be directed to David Lazaro whose telephone number is 703-305-4868. The examiner can normally be reached on 8:30-5:00 M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Hosain Alam can be reached on 703-308-6662. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-305-3900.

David Lazaro
November 13, 2003

HOSAIN ALAM
SUPERVISORY PATENT EXAMINER